CLAIMS

What is claimed is:

1.   A method for detecting defects in a surface of a container including:

providing a plastic container having a longitudinal axis and a surface;

directing ultraviolet radiation from a source to the surface of the container;

sensing a portion the radiation reflected from the surface of the container; and

generating a signal from the sensed portion of the reflected radiation representing a defect in the surface of the container.

2.   The method according to claim 1, including directing the plastic container along a path on a conveyor.

3.   The method according to claim 1, including sensing the portion of the radiation with at least one vision system responsive to ultraviolet radiation.

4.   The method according to claim 3, wherein the vision system is a charge coupled device (CCD) camera.

5.   The method according to claim 4, wherein the vision system has a minimum window size of 480 pixels by 480 pixels.

6.   The method according to claim 1, wherein said sensing includes performing algorithms for determining the scope of a defect.

7.   A surface defect detection system comprising:

    a source of ultraviolet radiation;

    a plastic container having a surface;

    means for directing said container along a path through the radiation;

    detecting means for receiving a portion of the ultraviolet radiation reflected from the surface of said plastic container, and being responsive to generate a signal; and

    a computer means connected to said detecting means and being responsive to the generated signal for calculating a defect value, comparing the defect value with stored standards, and indicating one of acceptance and rejection for said plastic container.

8.   The surface defect detection system according to claim 7, wherein said detecting means comprises at least one vision system responsive to ultraviolet radiation.

9.   The surface defect detection system according to claim 8, wherein the vision system is a charge coupled device (CCD) camera.

10.   The surface defect detection system according to claim 8, wherein the vision system has a minimum window size of 480 pixels by 480 pixels.

11

11. The surface defect detection system according to claim 7, wherein said computer means performs algorithms for determining the scope of a defect.

5   12. The surface defect detection system according to claim 7, including a computer monitor for displaying an inspection result generated by said computer means.